

## CLAIMS

We claim:

1. A method for the delivery of an incoming message in a messaging system comprising a central server of said messaging system, a plurality of messaging nodes, a plurality of user accounts with distinct messaging address identifiers, and a communications means for establishing a first communications link between each of said messaging nodes and said central server; said method comprising the steps of
  - a) maintaining an association table, associating user accounts with at least one messaging node;
  - b) identifying at least one user account indicated as a recipient of said incoming message, determined from a header of said incoming message;
  - c) determining membership of a messaging node within a primary messaging zone, corresponding to a subset of said messaging nodes associated in said association table with said recipient user account;
  - d) transmitting said incoming message across said first communications link to said messaging node, and
  - e) buffering said incoming message at said messaging node, prior to a user request to collect new messages from said messaging system,  
whereby said incoming message is buffered at messaging nodes from which recipients may subsequently request the collection of said incoming message.
2. The method of claim 1, wherein said first communications link, with at least one messaging node, is intermittent.

3. The method of claim 1, wherein said messaging system includes a multilevel network architecture between said central server and said messaging node.

4. The method of claim 1, wherein said messaging system further comprises a plurality of portable messaging units, where each of said portable messaging units

- a) includes communications means for establishing a temporary second communications link with any of at least a subset of said messaging nodes;
- b) conducts a data exchange with at least one of said messaging nodes, and
- c) includes user interface means for the display of said incoming message.

5. The method of claim 4, wherein said data exchange is conducted via a photonic communications system.

6. The method of claim 4, wherein said data exchange is conducted via a supersonic communications system.

7. The method of claim 4, wherein said data exchange is conducted via a low power radio frequency transceiver communications system with a communications range under 100 meters.

8. The method of claim 4, wherein said data exchange is conducted via a temporary data cable.

9. The method of claim 4, wherein said messaging nodes include docking ports for communication with said portable messaging units.

10. The method of claim 4, wherein said data exchange is initiated upon the placement of one of said portable messaging units in a docking port associated with said messaging node.

11. The method of claim 4, wherein said data exchange is encrypted.
12. The method of claim 4, wherein said portable messaging units may be configured by the user to conduct data exchanges on behalf of a plurality of user accounts.
13. The method of claim 1, wherein said buffered message is retained in storage at said message node until at least one of the following conditions are met:
  - a) said buffered message has been collected from said messaging node;
  - b) said buffered message has been collected from another messaging node;
  - c) said buffered message has been uncollected for longer than a predetermined interval;
  - d) or said messaging node buffer storage utilization exceeds predetermined limits.
14. The method of claim 1, wherein said messaging nodes are located at a plurality of publicly accessible locations across a geographic region.
15. The method of claim 1, wherein said association table associates at least one of said user accounts with a plurality of said messaging nodes.
16. The method of claim 1, wherein said first communications link comprises a dial-up modem connection.
17. The method of claim 1, wherein said first communications link comprises a store-and-forward satellite communications system.
18. The method of claim 1, wherein said first communications link, with at least one messaging node, is unreliable.

19. The method of claim 1, wherein said incoming message is an automated response to an outgoing message previously sent from said user account, where said outgoing message was a request for advanced network functions.

20. The method of claim 19, wherein said advanced network functions comprise network webpage retrieval.

21. A method for the delivery of an incoming message in a messaging system comprising a central server of said messaging system, a plurality of messaging nodes, a plurality of user accounts with distinct messaging address identifiers, and a communications means for establishing a first communications link between each of said messaging nodes and said central server, said method comprising the steps of

- a) maintaining an association table, associating user accounts with at least one messaging node;
- b) identifying at least one user account indicated as a recipient of said incoming message, determined from a header of said incoming message;
- c) identifying a primary messaging zone, corresponding to a subset of said messaging nodes associated in said association table with said recipient user account;
- d) transmitting said incoming message across said first communications link to members of said primary messaging zone, and
- e) buffering said incoming message at said messaging nodes, prior to a user request to collect new messages from said messaging system,

whereby said incoming message is buffered at messaging nodes from which recipients may subsequently request the collection of said incoming message.

22. A proactive buffering means within a messaging system, comprising

- a) a central server of said messaging system;
- b) a plurality of messaging nodes;
- c) a plurality of user accounts with distinct messaging address identifiers;
- d) a communications means for establishing a first communications link between each of said messaging nodes and said central server;
- e) a database maintenance means for maintaining an association table associating user accounts with at least one messaging node;
- f) an identification means for identifying at least one user account indicated as a recipient of an incoming message, determined from a header of said incoming message;
- g) a determination means for determining membership of said messaging node within a primary messaging zone, corresponding to a subset of said messaging nodes associated in said association table with said recipient user account;
- h) an intermittent communications means for transmitting said incoming message across said first communications link to said messaging node;
- i) a storage means for buffering said incoming message at said messaging node, prior to a user request to collect new messages from said messaging system,

for buffering said incoming message at messaging nodes across intermittent network connections from which recipients may subsequently request the collection of said incoming message.